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10/527,423	03/11/2005	Tatsuo Sudoh	0033-0989PUS1	5739
2292 7590 11/18/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
SALTARELLI, DOMINIC D				
ART UNIT		PAPER NUMBER		
2421				
NOTIFICATION DATE		DELIVERY MODE		
11/18/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

# Office Action Summary

**Application No.**

10/527,423

**Applicant(s)**

SUDOH, TATSUO

**Examiner**

DOMINIC D. SALTARELLI

**Art Unit**

2421

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2009.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-13 and 15-28 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed July 9, 2009 have been fully considered but they are not persuasive.

First applicant argues that the claims limitations of claims 7, 9, and 11 have not been addressed by the examiner, said limitations being, respectively, a "new arrival information obtaining unit", negative votes representing low preference, and votes applied to other data based on a shared attribute.

In response, regarding claim 7, the new arrival information obtaining unit is simply that part of the receiver unit which receives the television broadcasts and associated EPG data (receiving unit 120, see Maissel, col. 10 lines 18- 38 and col. 11, lines 48-64).

Regarding claim 9, as highlighted by the applicant, Maissel includes a disclosure of allowing a user to apply negative votes to particular aspects of their own profile, indicating low preference for certain programs (see Maissel, col. 12, lines 45-59).

Regarding claim 11, Maissel teaches creating abstract rules based on behavior profiles, such that indications of preference for one program translates into an indication of preference for other programs which share the same attributes (such as being "news" programs, see Maissel, col. 13 lines 9-33).

Next, applicant argues that Maissel only teaches changing the order of displayed EPG data, and does not teach a "switch destination data determining unit determining a switch destination" (in other words, deciding which received data to output to a device,

such as the television or a recording unit, "data to be switched to next", see applicant's originally filed specification, page 8, lines 5-6).

In response, Maissel teaches that customizing program schedule information involves far more than simply adjusting the order in which schedule information is presented, and includes determining which data to display and which not to display, and also determines which programs to automatically record as well (Maissel, col. 13 line 48 - col. 14 line 19).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-13 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Maissel et al. (6,637,029) [Maissel].

Regarding claims 1-13, and 20, Maissel discloses a data output apparatus (fig. 1), comprising:

a preference score vote receiving unit receiving a vote of a preference score of output data representing a degree of preference (how much time was

spent watching a particular program indicates the degree of preference, col. 12, lines 16-34);

a preference score counting unit counting the vote of preference score received by said preference score vote receiving unit (col. 12, lines 35-45, which could also be located at a headend for receiving preference information from multiple users simultaneously, col. 18, lines 58-67, which resets periodically, col. 12, lines 23-31);

an output unit outputting data (col. 10, lines 1-11, including new arrival information, such as alerts, col. 14, line 17 and col. 19, lines 31-49); and

a switch destination data determining unit determining a switch destination of data being output by said output unit based on a result of counting by said preference score counting unit (col. 13, lines 35-47), wherein

said switch destination data determining unit determines probability of data to be said switch destination such that data of high preference score has a high probability, based on the result of counting of the preference score by said preference score counting unit (col. 13, lines 35-47, where this is a lower limit set for voting score to distinguish channel surfing from actual viewing, col. 17, lines 17-32) or that data of low preference score has a high probability, based on the result of counting of the preference score by said preference score counting unit (when the profile is used an anti-profile, col. 15, lines 5-10, inverting the threshold determination above).

Regarding claims 26 and 27, Maissel discloses the data output apparatus of claim 1, wherein, upon receipt of a media data switch request (in this case, a channel change),

the switch destination data determining unit determines the switch destination of data based on the result of counting by the preference score counting unit and the output unit outputs data based on the determined switch destination of data (when the channel is a user's customized virtual channel which displays the user's preferred programs, col. 14, lines 10-16); and

further comprising: a storing unit storing the switch destination determined by the switch destination media data determining unit, wherein upon receipt of the media data switch request, the output unit outputs data by an incremental change in a channel based on the stored switch destination (the virtual channel information is stored, and dynamically changes channels to receive the preferred programs for output when a user tunes to said channel, col. 5, lines 35-38).

Regarding claim 28, Maissel discloses the data output apparatus of claim 1, wherein the vote of preference score is received as a result of a user's voting operation (col. 12, lines 45-59).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15, 16, and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel in view of Blahut et al. (5,446,490, of record) [Blahut]

Regarding claims 15, 16, and 21-25, Maissel discloses the data output apparatus of claim 1, but fails to disclose said output unit successively performs a process of switching and outputting the data that is being output at present and data as said switch destination different from said data that is being output at.

Blahut teaches that "virtual channels" are well known in the art, said channels being comprised of content from multiple sources, where a receiver will automatically switch between difference sources for content based on viewer preferences, creating a customized channel calculated to be of high interest to a viewer (col. 5 line 67 - col. 6 line 29).

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus of Maissel to include a "virtual channel" as taught by Blahut, wherein said output unit successively performs a process of switching and outputting the data that is being output at present and data as said switch destination different from said data that is being output at present, creating a customized channel of content that is calculated to be of high interest of a viewer.

6. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel and Blahut as applied to claim 16, and further in view of Itakura et al. (6,157,946, of record) [Itakura].

Regarding claims 17-19, Maissel and Blahut disclose the apparatus of claim 16, but fail to disclose the data output time determining unit (which would previously only control switching at the end of each data item) determines said time of data output by said output unit based on the result of counting preference score by said preference score counting unit.

In an analogous art, Itakura discloses a data output apparatus wherein user interest is determined based upon user interaction, and items of greater interest are displayed for longer periods of time (col. 3, lines 1-6).

It would have been obvious at the time to a person of ordinary skill in the art to display types of content longer if the user is determined to be interested in said type of content, as taught by Itakura, since this would further improve the targeting of content taught by Maissel and Blahut, as user interaction which indicates interest allows the apparatus to provide more immediate benefit to quickly respond by extending the time spent outputting data of a certain type in which the user has expressed interest. The opposite would apply in the case of using Maissel's 'anti-profile'.

### ***Conclusion***



7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DOMINIC D. SALTARELLI** whose telephone number is (571)272-7302. The examiner can normally be reached on Monday - Friday 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dominic D Saltarelli/  
Primary Examiner, Art Unit 2421